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8 generating, in the manner defined by said database metadata, an object id derived
9 from one or more values in the one or more columns in said one or more rows;
10 and
11 presenting data from said one or more rows as an object that belongs to said object
12 class and that has said object id.

1 2. The method of Claim 1, wherein the step of generating an object id includes
2 generating an object id based on values from one or more rows of a relational table
3 that belongs to the set of one or more tables.

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1 5. The method of Claim 1, wherein:
2 the method further includes the steps of:
3 receiving a request to define a view, said request specifying that said object id
4 is generated based on values in said one or more columns;
5 in response to receiving the request to define the view, storing specification
6 data that specifies the one or more columns; and
7 the step of generating an object id includes determining how to generate the object id
8 by inspecting said specification data.

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1 7. A method for presenting, as an object, data from a set of one or more tables residing
2 in one or more databases, the method comprising the steps of:
3 reading first database metadata that indicates how to generate a column object from
4 one or more columns;

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5 reading a first set of data from the one or more columns of a plurality of rows from
6 the set of one or more tables, wherein second database metadata defines said
7 one or more tables, wherein said second database metadata does not specify
8 how to generate said column object from said one or more columns;
9 generating, in the manner indicated by said first database metadata, a particular
10 column object based on said first set of data; and
11 presenting a second set of data from said set of one or more tables as object oriented
12 data by presenting said second set of data as said object that has said particular
13 column object as an attribute.

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1 9. The method of Claim 7, wherein the step of generating a particular column object
2 includes generating a collection object.

1 12. The method of Claim 9, wherein the step of generating a particular column object
2 includes generating a column object belonging to a user specified object type.

1 13. The method of Claim 9, where the step of generating a particular column object
2 includes generating a column object that is a reference to another object.

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1 14. The method of Claim 13, wherein the step of generating a particular column object
2 includes generating a column object that is a reference to an object presented by an
3 object view.

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1 15. The method of Claim 13, wherein the step of generating a particular column object
2 includes generating a column object that is a reference to an object residing in a
3 database.

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1 16. A computer system, comprising:
2 a processor;
3 a memory coupled to said processor;
4 database metadata that indicates how to derive object ids from values in one or more
5 columns;
6 a set of one or more tables, said set of one or more tables containing one or more
7 rows, wherein said one or more rows do not store an object id used for
8 modeling the data in said one or more rows as an object that belongs to said
9 object class;
10 said processor configured to read data from one or more rows of the set of one or
11 more tables;
12 said processor configured to generate, in the manner defined by said database
13 metadata, an object id derived from one or more values from said one or more
14 rows, wherein said one or more values reside in said one or more columns;
15 and
16 said processor configured to present data from said one or more rows as an object that
17 belongs to an object class and that has said object id.

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1 19. A computer system, comprising:
2 a processor;
3 a memory coupled to said processor;
4 one or more databases;
5 a set of one or more tables contained in said one or more databases;
6 first database metadata that defines how to generate a column object from one or
7 more columns;
8 second database metadata that defines said one or more tables, wherein said second
9 database metadata does not specify how to generate said column object from
10 said one or more columns;
11 said processor configured to read a first set of data from a plurality of rows from the
12 set of one or more tables;
13 said processor configured to generate, in the manner defined by said first database
14 metadata, a particular column object based on said first set of data; and
15 said processor configured to present a second set of data from said set of one or more
16 tables as object oriented data by presenting said second set of data as said
17 object that has said particular column object as an attribute.

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1 20. A computer-readable medium carrying one or more sequences of one or more
2 instructions for presenting data from a set of one or more tables as a set of objects that
3 belong to an object class, wherein the execution of the one or more sequences of the
4 one or more instructions causes the one or more processors to perform the steps of:

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5 reading data from one or more rows of the set of one or more tables, wherein said one
6 or more rows do not store an object id used for modeling the data in said one
7 or more rows as an object that belongs to said object class;
8 reading database metadata that defines how to derive object ids from values in one or
9 more columns;
10 generating, in the manner defined by said database metadata, an object id derived
11 from one or more values in the one or more columns in said one or more rows;
12 and
13 presenting data from said one or more rows as an object that belongs to said object
14 class and that has said object id.

1 21. The computer readable medium of Claim 20, wherein the step of generating an object
2 id includes generating an object id based on values from one or more rows of a
3 relational table that belongs to the set of one or more tables.

1 22. The computer readable medium of Claim 21, wherein:
2 the one or more sequences of instructions includes one or more instructions for
3 performing the steps of:
4 receiving a request to define a view, said request specifying one or more
5 columns of the set of one or more tables containing values used to
6 generate said object id;
7 in response to receiving the request to define the view, storing specification
8 data that specifies the one or more columns; and

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F9 9 the step of generating an object id includes determining how to generate the object id
10 by inspecting said specification data.

F10 1 ~~24~~ 24. A computer-readable medium carrying one or more sequences of one or more
2 instructions for presenting, as an object, data from a set of one or more tables residing
3 in one or more databases, wherein the execution of the one or more sequences of the
4 one or more instructions causes the one or more processors to perform the steps of:
5 reading first database metadata that defines how to generate a column object from one
6 or more columns;
7 reading a first set of data from the one or more columns of a plurality of rows from
8 the set of one or more tables, wherein second database metadata defines said
9 one or more tables, wherein said second database metadata does not specify
10 how to generate said column object from said one or more columns;
11 generating, in the manner defined by said first database metadata, a particular column
12 object based on said first set of data; and
13 presenting a second set of data from said set of one or more tables as object oriented
14 data by presenting said second set of data as said object that has said particular
15 column object as an attribute.

F11 1 ~~27~~ 28 The computer-readable medium of Claim ~~24~~ 26, wherein the step of generating a
2 particular column object includes generating a collection object.

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1 ³¹~~30~~. The computer-readable medium of Claim ²⁸~~27~~, wherein the step of generating a
2 particular column object includes generating a column object belonging to a user
3 specified object type.

1 ³²~~31~~. The computer-readable medium of Claim ²⁸~~27~~, wherein the step of generating a
2 particular column object includes generating a column object that is a reference to
3 another object.

1 ³³~~32~~. The computer-readable medium of Claim ³²~~31~~, wherein the step of generating a
2 particular column object includes generating a column object that is a reference to an
3 object presented by an object view.

1 ³⁴~~33~~. The computer-readable medium of Claim ³²~~31~~, wherein the step of generating a
2 particular column object includes generating a column object that is a reference to an
3 object residing in a database.

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1 ²⁵~~35~~. The computer-readable medium of Claim ²⁴~~34~~, wherein the steps further comprise the
2 step of accessing the object based on the reference generated for the object.